

DETAILED ACTION

Allowable Subject Matter

1. Claims 13 and 16-34 are allowed.
2. The following is an examiner's statement of reasons for allowance: the present claims are allowable over the closest prior art Bhatnagar et al. (US 6,846,758) and Benjamin et al. (GB 1386953) for the following reasons.
3. Bhatnagar et al. teach a method of forming a woven fabric laminate that has superior resistance to penetration by ballistic projectiles (abstract). However, the laminates of Bhatnagar et al. are not curved nor wrinkle-free. Further there is no motivation in Bhatnagar et al. for one of ordinary skill in the art to produce a wrinkle-free curved object wherein the mean fiber diameter varies from one location to another.
4. Benjamin et al. teach a molded hollow article, such as a helmet, wherein the object is curved in one or more directions. However, the objects of Benjamin are formed from a slip-forming process, which produces a materially different object than claimed by the applicants. An object formed by a slip-forming process does not contain drawn fibers, thus the diameters of the fibers would be the same throughout the fiber length. Due to the fibers having the same diameters, the object has wrinkling throughout the thickness of the curved ply in several regions. Thus, one of ordinary skill in the art would not be motivated to modify the invention of Bhatnagar with the process of Benjamin to reach the instant invention.
5. Thus, it is clear that alone or in combination the prior art fails to teach the instant invention and as such the claims are passed to issue.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELLEN S. WOOD whose telephone number is (571)270-3450. The examiner can normally be reached on M-F 730-5 with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571)272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner, Art Unit 1782

/Rena L. Dye/
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Page 4